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An examination of the relationship between self-compassion, temperament types and cognitive flexibility according to deceiving tendency

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ABSTRACT

Aim: The aim of this study was to examine self-compassion, temperament types and cognitive flexibility characteristics of individuals residing in Istanbul, Turkey aged between 18 and 45 years who never cheated and who cheated at least once.

Material and Method: The sample of this study consists of 85 individuals who never cheated and 91 individuals who cheated at least once, residing in Istanbul, Turkey aged between 18 and 45 years. The sample was selected by using simple random sampling. The sample was administered Sociodemographic Form, Deception Tendency Scale (DTS), Self-Compassion Scale (SCS), Temperament Evaluation of Memphis, Pisa, Paris, San Diego-Autoquestionnaire (TEMPS-A) and Cognitive Flexibility Scale (CFS). First, it was checked whether there was a normal distribution or not. For this, skewness and kurtosis values were checked. This study was carried out by the relational screening model, one of the quantitative research methods. Statistical evaluations were analyzed using SPSS (Statistical Package for Social Sciences) 25.0.

Results: The results of this study showed that there was a significant difference between self-compassion components: self-judgment, common humanity, isolation, and over-identification scores of individuals with and without tendency to deceive ($p<.05$). There was a positive relationship between psychological flexibility and romantic relationship quality ($p<.05$). Individuals without tendency to deceive scored higher on self-compassion, self-judgment, isolation, and over-identification compared to individuals with tendency to deceive ($p<.05$). There was a significant difference between cognitive flexibility scores of individuals with and without tendency to deceive ($p<.05$).

Conclusion: The results of the study revealed the importance of the cognitive flexibility.

Keywords: Deceiving, self-compassion, temperament types, cognitive flexibility

INTRODUCTION

Although sexual intercourse outside of marriage or relationship is not widely approved by societies, not everyone is monogamous. Many people experience non-relational sexual intercourse while they are married or in a relationship (1). Cheating can be defined as the deterioration of the agreement and trust between individuals in a close relationship, through emotional, sexual, or romantic involvement of a different person (2). According to Carnes (3), children who are exposed to cheating in their families have a higher risk of cheating in later ages. Moultrup (4) explains this by children taking their family relationships as a model. Wiederman (5) shows that, as a common feature of studies on cheating, the percentage of men having extramarital affairs is much higher than women. Kinsey, Pomeroy, Martin and Gebhard (6) found that 36% of married men and 25% of married women cheat on their spouses (7). Whisman, Gordon and Chatay (8) stated in their research that neurotic personality structure, religious belief of the person, and pregnancy process are important predictors of sexual infidelity. In another study supporting this research revealed that individuals with high impulsivity cannot resist an opportunity that the desire in this direction may bring, and the potential to evaluate potential sexual opportunities can increase (9).

The concept of self-compassion was created based on Eastern psychology (10). Compassion is an emotion that one feels in the face of other people's pain and distress (11). As people's self-compassion level increases, they

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can understand that they and others deserve attention and love, and they can balance their own needs and the needs of others in their relationships (12). Self-compassionate individuals strengthen their self-confidence by getting rid of destructive thoughts and emotional traps, while also reducing their depression and anxiety (13). Studies have shown that self-compassionate individuals get more satisfaction from life and self-compassion undertakes a preventive task against negative emotional states such as depression, anxiety, and stress (14).

Although there are differences in terms of personality traits, it can be said that there are two main factors that determine personality in general. These are: Hereditary traits (temperament) and character traits (character) (15).

In the literature, there are studies examining the relationship between self-related variables such as self-esteem, self-efficacy and self-awareness and psychological well-being. It is clear that the concept of self-compassion may also be one of the variables in current research (16). For this reason, the relationship between psychological symptoms and the ability of individuals to understand and show compassion for themselves and others has become an important focus in recent studies.

It is stated that individuals structure the world according to their own thoughts and act in this direction. Cognitions are acquired through an individual's interaction with others. However, the individual may form inflexible, over-generalized, and dysfunctional cognitions during these experiences (17). Cognitive flexibility can also be considered as an individual's ability to adapt to certain situations and to move from one thought to another, or to approach different problems with multi-dimensional strategies (18). Martin, Anderson and Thweatt (19) stated that individuals with cognitive flexibility feel secure to communicate in challenging situations. While cognitive flexibility shows a positive relationship with being non-combatant and tolerant, it shows a negative relationship with verbal aggression. In addition, the literature revealed that cognitive flexibility, which can be defined as the ability to adapt to new situations (20), has a significant relationship with self-compassion (21). As the cognitive flexibility of individuals increases, their level of adaptation also increased (22). Additionally, individuals with cognitive flexibility believe that they have the right to forgive themselves because they think that they do not have a single path but have access to alternative options (23). Self-compassion reduces self-criticism, self-doubt, excessive feelings of isolation, and over-identification (22) and increases psychological functioning and adjustment (21). Overall, these findings reveal that cognitive flexibility may have a predictive role on self-compassion.

Aim of the study

The aim of this study was to examine self-compassion, temperament types and cognitive flexibility characteristics of 85 individuals who never cheated and 91 individuals who cheated at least once, residing in Istanbul, Turkey aged between 18 and 45 years. The aim of this research is to show whether there is a differentiation between the variables of depressive temperament, cyclothymic temperament, hyperthymic temperament, irritable temperament, anxious temperament, self compassion, self-kindness, self-judgment, common humanity, isolation, over-identified, mindfullness, cognitive flexibility in those who have and those who do not have a tendency to deceive. The study was carried out on the basis that it may be useful for mental health professionals to act by understanding whether working with these variables shows a difference in clients with a tendency to deceive.

MATERIAL AND METHOD

The study was carried out with the permission of Istanbul Aydın University Social Sciences Ethics Committee (Date: 09.06.2021, Decision No: 2021/07). All procedures were carried o ut in accordance with the ethical rules and the principles of the Declaration of Helsinki.

Research Model

This study was conducted using the comparative survey method, one of the relational survey models.

Research Universe and Sample

The sample of this study consists of 85 individuals who never cheated and 91 individuals who cheated at least once, residing in Istanbul, Turkey aged between 18 and 45 years. The sample was selected by using simple random sampling. While determining the cheating and non-cheating groups in this study, we determined this by asking those who did not take the demographic form and those who cheated at least once. Accordingly, the groups were divided. The sample size was calculated with the "G. Power-3.1.9.4" programme with a 95% confidence interval before data collection. Since there is no similar study in the literature, the effect size standardised by Cohen (24) was taken as a reference. Accordingly, in this study, the minimum number of samples was determined as 128 with an effect size of 0.50, alpha value of 0.05 and theoretical power of 0.80. Informations are listed below:

T tests-means:	Difference between two independent means (two groups)	
Analysis:	A priori: Compute required sample size	
Input:	Tail(s)	= Two
	Effect size d	= 0.5
	α err prob	= 0.05
	Power (1-β err prob)	= 0.80
	Allocation ratio N2/N1	= 1
Output:	Noncentrality parameter δ	= 2.8284271
	Critical t	= 1.9789706
	Df	= 126
	Sample size group 1	= 64
	Sample size group 2	= 64
	Total sample size	= 128

Data Collection

Tools were distributed to 176 participants. It took an average of 20 minutes to fill data collection tools and there were no breaks between them. While participants were answering data collection tools, they were ensured to be in a suitable environment without noise. Statistical evaluations were analyzed using SPSS 25.0 package program. Before starting the analyses, it is first checked whether the scales meet the assumption of normal distribution. At this control stage, the skewness and kurtosis values of the scales are examined. These values include the reference range of -2 +2 (25). As a result of this evaluation, parametric tests were preferred.

Pearson correlation analysis was used to test the relationship between the measurement tools, and Independent Groups t-test was used to compare the groups with and without deception tendency according to the scale scores. Independent Samples T-Test, which is a parametric test, is performed to test whether there is a significant difference between the means of a dependent quantitative variable of two independent groups. The assumptions for performing this test are that the sample is randomly selected from the population, the variable data whose averages are at least in the interval scale to be compared show normal distribution characteristics in both groups, the two groups are independent of each other, and the variances of the groups are expected to be equal (26; 27; 28). All assumptions were found to be fulfilled.

Data Collection Tools

Sociodemographic Form, Deception Tendency Scale (DTS), Self-Compassion Scale (SCS), Temperament Evaluation of Memphis, Pisa, Paris, San Diego-Autoquestionnaire (TEMPS-A) and Cognitive Flexibility Scale (CFS) were used as data collection tools in the study.

Sociodemographic Form: It is a personal data form consisting of age, gender, marital status, and educational status.

Deception Tendency Scale (DTS): It was developed based on the general views of social exchange theory (29). It is a 30-item five-point Likert type scale developed by Polat (29) to measure the tendency of married individuals to deceive. To determine the scale's reliability, Cronbach's Alpha and two-half reliability were tested. The results showed that both reliability indices were .95 for Cronbach's Alpha and.95 for two-half reliability.

Self-Compassion Scale (SCS): It was developed by Neff (10). The subscales' respective internal consistency reliability coefficients were found to be.78,.77,.80,.79,.75, and.81. It was discovered that the test-retest reliability coefficients were.88,.88,.80,.85,.85, and.88, respectively and adapted into Turkish by Akın Ü, Akın A and Abacı (30). It consists of 26 items and 6 subscales: self-kindness, self-judgment, common humanity, isolation, mindfulness, over-identification. It is a five-point Likert type scale. Test-retest reliability values ranged from.56 to.69, while internal consistency coefficients ranged from.72 to.80. Adjusted item-total correlations varied from.48 to.71, and a t-test revealed significant differences between the means of each item's upper 27% and lower 27% points.

Temps-A: It was developed by Akiskal (31) and adapted into Turkish by Vahip, Kesebir, Alkan, Yazıcı, Akiskal K and Akiskal H (32). It onsists of 100 items and 5 subscales: depressive, cyclothymic, hyperthymic, irritable, and anxious. In Akiskal's study two internal consistency measures coefficient and item-total correlations were used to evaluate the TEMPS-reliability. The internal consistency coefficients of TEMPS-A were 0.91 for cyclothymic temperament subscale, 0.81 for depressive temperament subscale, 0.77 for irritability, 0.76 for hyperthymic temperament, and 0.67 for anxious temperament. In the study of Vahip et al., test-retest reliability ranged from 0.73 to 0.93 and Cronbach-Alpha coefficients from 0.75 to 0.84.

Cognitive Flexibility Scale (CFS): It was developed by Dennis and Vander Wal (33) to measure the ability of individuals to produce alternative, harmonious, appropriate, and balanced thoughts in the face of difficult situations. It was adapted into Turkish by Gülüm and Dağ (34). It consists of 20 items and 2 subscales. It is a five-point Likert type scale. In Dennis and Vander Wal's studies, the Cronbach alpha value of the Alternatives subscale was 0.91 in the first and last measurements. The Cronbach's alpha values of the control subscale were 0.86 in the first measurement and 0.84 in the last measurement (33). In the adaptation study, the two-factor structure of the original scale was confirmed. The Cronbach's alpha value for the total score was calculated as 0.90, 0.89 for the alternatives sub-dimension and 0.85 for the control sub-dimension (34).

RESULTS

Of the participants without tendency to deceive; the average age was 30 (SD=8), and minimum age was 18, maximum age was 45 (**Table 1**).

Of the participants with tendency to deceive; the average age was 30 (SD=7), and minimum age was 18, maximum age was 45 (**Table 1**).

Table 1. Descriptive Statistics of Age

	n	Min	Max	M	SD
Participants without tendency to deceive	85	18	45	30	8
Participants with tendency to deceive	91	18	45	30	7

There was a significant difference between hyperthymic temperament scores of participants without tendency to deceive (M=10.42, SD=4.69) and participants with tendency to deceive (M=11.93, SD=4.81); t (174)=-2.11, p=0.037 (**Table 2**).

There was a significant difference between irritable temperament scores of participants without tendency to deceive (M=3.40, SD=3.35) and participants with tendency to deceive (M=5.26, SD=3.93); t (174)=3.37, p=0.001 (**Table 2**).

There was a significant difference between anxious temperament scores of participants without tendency to deceive (M=6.14, SD=5.12) and participants with tendency to deceive (M=8.08, SD=5.12); t (174)=-2.50, p=0.013 (**Table 2**).

There was a significant difference between self-compassion scale scores of participants without tendency to deceive (M=3.52, SD=0.57) and participants with tendency to deceive (M=3.17, SD=0.66); t (174)=3.69, p=0.000 (**Table 2**).

There was a significant difference between self-judgment scores of participants without tendency to deceive (M=3.94, SD=0.67) and participants with tendency to deceive (M=3.51, SD=0.85); t (169.42)=3.68, p=0.000 (**Table 2**).

There was a significant difference between common humanity scores of participants without tendency to deceive (M=3.03, SD=0.85) and participants with tendency to deceive (M=2.68, SD=0.86); t (174)=2.67, p=0.008 (**Table 2**).

There was a significant difference between isolation scores of participants without tendency to deceive (M=3.84, SD=0.81) and participants with tendency to deceive (M=3.41, SD=1.08); t (166.17)=2.99, p=0.003 (**Table 2**).

Table 2. T-test results of comparison of deceiving tendency in TEMPS-a temperament scale, self-compassion scale, cognitive flexibility scale scores

		n	M	SD	t	df.	p
Depressive Temperament	Participants without tendency to deceive	85	5.06	3.02	-1.92	174	0.057
	Participants with tendency to deceive	91	6.01	3.52			
Cyclothymic Temperament	Participants without tendency to deceive	85	7.28	4.87	-1.81	174	0.072
	Participants with tendency to deceive	91	8.60	4.83			
Hyperthymic Temperament	Participants without tendency to deceive	85	10.42	4.69	-2.11	174	0.037*
	Participants with tendency to deceive	91	11.93	4.81			
Irritable Temperament	Participants without tendency to deceive	85	3.40	3.35	-3.37	174	0.001*
	Participants with tendency to deceive	91	5.26	3.93			
Anxious Temperament	Participants without tendency to deceive	85	6.14	5.12	-2.50	174	0.013*
	Participants with tendency to deceive	91	8.08	5.12			
Self-Compassion Scale	Participants without tendency to deceive	85	3.52	0.57	3.69	174	0.000*
	Participants with tendency to deceive	91	3.17	0.66			
Self-Kindness	Participants without tendency to deceive	85	3.00	0.83	1.61	174	0.110
	Participants with tendency to deceive	91	2.79	0.85			
Self-Judgment	Participants without tendency to deceive	85	3.94	0.67	3.68	169.42	0.000*
	Participants with tendency to deceive	91	3.51	0.85			
Common Humanity	Participants without tendency to deceive	85	3.03	0.85	2.67	174	0.008*
	Participants with tendency to deceive	91	2.68	0.86			
Isolation	Participants without tendency to deceive	85	3.84	0.81	2.99	166.17	0.003*
	Participants with tendency to deceive	91	3.41	1.08			
Over-Identification	Participants without tendency to deceive	85	3.78	0.79	2.39	174	0.018*
	Participants with tendency to deceive	91	3.46	0.93			
Mindfulness	Participants without tendency to deceive	85	3.26	0.90	0.26	174	0.793
	Participants with tendency to deceive	91	3.22	0.92			
Cognitive Flexibility Scale	Participants without tendency to deceive	85	56.00	7.44	3.40	174	0.001*
	Participants with tendency to deceive	91	51.92	8.41			

*p<0.05 Used anaylze: Independent Samples T-Test

There was a significant difference between over-identification scores of participants without tendency to deceive (M=3.78, SD=0.79) and participants with tendency to deceive (M=3.46, SD=0.93); t (174)=2.39, p=0.018 (**Table 2**).

There was a significant difference between cognitive flexibility scale scores of participants without tendency to deceive (M=56.00, SD=7.44) and participants with tendency to deceive (M=51.92, SD=8.41); t (174)=3.40, p=0.001 (**Table 2**).

Between deceiving tendency scale and depressive temperament (r(176)=.16, p<.05), cyclothymic temperament (r(176)=.16, p<.05), irritable temperament (r(176)=.27, p<.01), anxious temperament (r(176)=.22, p<.01) were found to be pozitively correlated. Between deceiving tendency scale and self compassion scale (r(176)=-.32, p<.01), self-judgment (r(176)=-.30, p<.01), common humanity (r(176)=-.21, p<.01), isolation (r(176)=-.28, p<.01), mindfulness (r(176)=-.24, p<.01), and cognitive flexibility scale (r(176)=-.27, p<.01) were found to be negatively correlated. (**Table 3**).

Between depressive temperament and self compassion scale (r(176)=-.46, p<.01), self-kindness (r(176)=-.23, p<.01), self-judgment (r(176)=-.38, p<.01), isolation (r(176)=-.46, p<.01), mindfulness (r(176)=-.48, p<.01), over-identified (r(176)=-.26, p<.01), and cognitive flexibility scale (r(176)=-.36, p<.01) were found to be negatively correlated. (**Table 3**).

Between cyclothymic temperament and self compassion scale (r(176)=-.41, p<.01), self-judgment (r(176)=-.46, p<.01), isolation (r(176)=-.47, p<.01), and mindfulness (r(176)=-.54, p<.01) were found to be negatively correlated. (**Table 3**).

Between hyperthymic temperament and self-kindness (r(176)=.18, p<.05), over-identified (r(176)=.23, p<.01), and cognitive flexibility scale (r(176)=.36, p<.01) were found to be positively correlated. (**Table 3**).

Between irritable temperament and self compassion scale (r(176)=-.43, p<.01), self-kindness (r(176)=-.18, p<.05), self-judgment (r(176)=-.47, p<.01), isolation (r(176)=-.37, p<.01), mindfulness (r(176)=-.44, p<.01), over-identified (r(176)=-.23, p<.01 and cognitive flexibility scale (r(176)=-.16, p<.05) were found to be negatively correlated. (**Table 3**).

Between anxious temperament and self compassion scale (r(176)=-.47, p<.01), self-judgment (r(176)=-.45, p<.01), isolation (r(176)=-.51, p<.01), mindfulness (r(176)=-.57, p<.01), over-identified (r(176)=-.18, p<.05), and cognitive flexibility scale (r(176)=-.30, p<.01) were found to be negatively correlated. (**Table 3**).

Between cognitive flexibility scale and self compassion scale (r(176)=.31, p<.01), self-kindness (r(176)=.28, p<.01), self-judgment (r(176)=.23, p<.01), common humanity (r(176)=.22, p<.01), isolation (r(176)=.19, p<.05), mindfulness (r(176)=.24, p<.01), and over-identified (r(176)=.38, p<.01) were found to be positively correlated. (**Table 3**).

Limitations

This study has some limitations. Since the scales used in the study are self-report scales, we assume that the participants are objective when they answering the scales. The sincerity of the participants during the scale answering phase may vary. The presence of 176 participants in the study is seen as a limitation. It was also assumed that the participants filled in the scales sincerely.

Table 3. Pearson corelation results between deceiving tendency scale, TEMPS-A temperament scale, self compassion scale, cognitive flexibility scale scores

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Deceiving tendency scale	1													
2. Depressive temperament	.16*	1												
3. Cyclothymic temperament	.16*	.63**	1											
4. Hyperthymic temperament	.10	-.25**	.09	1										
5. Irritable temperament	.27**	.32**	.55**	.30**	1									
6. Anxious temperament	.22**	.66**	.68**	-.03	.52**	1								
7. Self compassion scale	-.32**	-.46**	-.41**	.09	-.43**	-.47**	1							
8. Self-kindness	-.15	-.23**	-.08	.18*	-.18*	-.12	.73**	1						
9. Self-judgment	-.30**	-.38**	-.46**	.04	-.47**	-.45**	.77**	.33**	1					
10. Common humanity	-.21**	-.13	.06	.06	-.10	-.05	.60**	.75**	.15*	1				
11. Isolation	-.28**	-.46**	-.47**	.00	-.37**	-.51**	.81**	.32**	.70**	.23**	1			
12. Mindfulness	-.24**	-.48**	-.54**	.05	-.44**	-.57**	.73**	.29**	.63**	.08	.65**	1		
13. Over-identified	-.04	-.26**	-.04	.23**	-.23**	-.18*	.52**	.71**	.21**	.64**	.14	.22**	1	
14. Cognitive flexibility scale	-.27**	-.36**	-.12	.36**	-.16*	-.30**	.31**	.28**	.23**	.22**	.19*	.24**	.38**	1

*p<0.05 Used anaylze: Pearson Corellation Analyze

DISCUSSION

The aim of this study was to examine self-compassion, temperament types and cognitive flexibility according to deceiving tendency.

There was no study in the literature that examined the relationship between deceiving and temperament types. In this respect, a significant difference was found between hyperthymic, irritable, and anxious temperament scores of individuals with and without tendency to deceive. Individuals with tendency to deceive got higher hyperthymic, irritable, and anxious temperament scores. Temperament is an important personality trait that shows the emotional aspect and there are different temperament types. Hyperthymic temperament is characterized by positive, happy, social, confident, creative, practical personality traits, less need for sleep, and leadership features (35). This temperament also has other features such as meddling in other people's affairs, seeking stimulant, or having random sexual intercourse (36). Considering these features, individuals with hyperthymic temperament may have problems in not meeting the needs of love, belonging and secure attachment in a romantic relationship. Anxious temperament is characterized by avoidance of social environments and close relationships with people, shyness, fear of losing support, and hypersensitivity to criticism and disapproval. Mostly pessimism, rarely well-being is observed. There are other features such as being easily angered and impulsive, contemplating, criticizing, complaining, and approaching people even when not wanted (37). Therefore, individuals with anxious temperament may tend to abandon or deceive in order to cope with the fear of losing the people who are important to them. Irritable temperament and cyclothymic temperament have some features in common. However, Irritable temperament differs from cyclothymic by its high energy and low-level empathy. These individuals approach situations with suspicion and critical thinking (35). Irritable temperament is characterized by being pessimistic, easily angered, dysphoric, judgmental, having many complaints and undesirable humor (36). Based on this information, it is considered that individuals with irritable temperament will have a high tendency to deceive.

A significant difference was found between self-compassion scores of individuals with and without tendency to deceive. Individuals without tendency to deceive scored higher on self-compassion compared to individuals with tendency to deceive. Self-compassion refers to being open to painful experiences and personal failings, accepting these experiences and failings as a natural part of being human being instead of ignoring them (38). Gilbert and Irons (37) stated that self-compassion increases individuals' well-being as it helps individuals to be more sensitive in their interpersonal relationships. Bibi (39) stated that the relationship between self-compassion and marital adjustment is significant, and that the individual's well-being, self-criticism and over-identification are important predictors of marital adjustment. Wispe (40) defined compassion as being aware of another's pain and trying to do what is necessary to alleviate that pain. Onaylı (41) mentioned that cognitive assessment, self-compassion, rumination, and forgiveness have important roles in coping with negative emotional reactions to deceiving, and that therapists can help deceived clients to cope with rumination, strengthen their self-compassion, and improve their ability to forgive. Based on this information, it is considered that individuals without tendency to deceive are more self-compassionate.

A significant difference was found between cognitive flexibility scores of individuals with and without tendency to deceive. Individuals without tendency to deceive scored higher on cognitive flexibility compared to individuals with tendency to deceive. Due to the high cognitive flexibility of individuals who do not have a tendency to deceive, it is thought that they can look from the perspective of others and do not cheat on their partners. Thompson (42) revealed in his study that being able to see from the perspective of others and establish an empathetic relationship with them requires having a certain level of cognitive flexibility.

According to the study of Solmus (43), individuals with secure attachment style show more commitment, satisfaction and closeness to the relationship and invest more than individuals with insecure attachment style. Yumbul (44) examined the effects of attachment styles on tendency to deceive and showed that people with secure attachment have lower deceiving tendencies than people with insecure attachment. Based on these findings, it can be said that the cognitive flexibility of individuals with a tendency to deceive is low. Attachment styles are one of the important factors that determine the cognitive flexibility level of individuals. Individuals' ability to establish social relationships affects their development of cognitive flexibility (45). Thus, individuals who have weak social relationships have low levels of cognitive flexibility. Overall, attachment styles seem to be quite effective in determining communication motivation and deceiving tendency in romantic relationships (29).

Between deceiving tendency scale and depressive temperament, deceiving tendency scale and cyclothymic temperament, deceiving tendency scale and irritable temperament, deceiving tendency scale and anxious temperament were found to be pozitively correlated. A positive correlation was found between the increase in deceiving tendency and depressive temperament, cyclothymic temperament, irritable temperament and anxious temperament. The absence of any study in the field

between deceiving tendency and temperament shows the importance of investigating the subject. The result of the study indicates that individuals with depressive, irritable, anxious temperament may be more prone to deceiving, and it is thought that considering this situation for mental health professionals may be beneficial in increasing the foresight against clients.

Between deceiving tendency scale and self compassion scale, deceiving tendency scale and self-judgment, deceiving tendency scale and common humanity, deceiving tendency scale and isolation, deceiving tendency scale and mindfulness, deceiving tendency scale and cognitive flexibility scale were found to be negatively correlated. The results show that individuals with self-compassion, self-judgement, common humanity, mindfulness, and cognitive flexibility decrease their tendency to deceive as these characteristics increase. It has been observed that the cognitive flexibility of people who forgive cheating is higher than those who are not prone to cheating (46). In another study, this ability to forgive was found to be the same for the person himself, and people with high cognitive flexibility were more likely to forgive themselves than those with low cognitive flexibility (47). From this point of view, it is possible to say that cognitive flexibility and other functional characteristics are negatively correlated with the tendency to cheat, as a predictable result. This situation seems to indicate that individuals who are cognitively flexible, can evaluate themselves realistically, and therefore approach their personal characteristics more rationally, may be less prone to deceiving. It is thought that these results will be useful for mental health professionals working in the field. Because it is thought that developing the characteristics in individuals with a tendency to cheat will be useful in dealing with this situation.

Between depressive temperament and self compassion scale, depressive temperament and self-kindness, depressive temperament and self-judgment, depressive temperament and isolation, depressive temperament and mindfulness, depressive temperament and over-identified, depressive temperament and cognitive flexibility scale were found to be negatively correlated. It is seen that the depressive temperament, which indicates that the individual is pessimistic, more introverted, physically limited, and has less enjoyment from life, is negatively related to self-compassion, self-kindness, self-judgment, isolation, awareness, over-identification and cognitive flexibility. This result will help to see the deficiencies in someone with depressive temperament.

Between cyclothymic temperament and self compassion scale, cyclothymic temperament and self-judgment, cyclothymic temperament and isolation, cyclothymic temperament and mindfulness were found to be negatively correlated. In cyclothymic temperament, there are both manic and depressive symptoms, the person experiences dull thoughts and emotions, and the sensation of exhaustion usually takes center stage along with hypomanic features (48). For this reason, it is seen that the negative relationship between cyclothymic temperament and self-compassion, self-judgment, isolation and mindfulness is in accordance with the expected results.

Between hyperthymic temperament and self-kindness, hyperthymic temperament and over-identified, hyperthymic temperament and cognitive flexibility scale were found to be positively correlated. It is known that hyperthymic temperament, which causes intense emotion, has a facilitating effect on mood disorders (49). This trait, which suggests that the person has trouble managing their feelings, is believed to have a bad impact on self-kindness, over-identification, and cognitive flexibility as an anticipated outcome.

Between irritable temperament and self compassion scale, irritable temperament and self-kindness, irritable temperament and self-judgment, irritable temperament and isolation, irritable temperament and mindfulness, irritable temperament and over-identified, irritable temperament and cognitive flexibility scale were found to be negatively correlated. The negative relationship between irritable temperament and self-compassion, self-kindness, self-judgment, isolation, mindfulness, over-identification and cognitive flexibility emerges as a predictable result based on the appearance of irritable personality traits.

Between anxious temperament and self compassion scale, anxious temperament and self-judgment, anxious temperament and isolation, anxious temperament and mindfulness, anxious temperament and over-identified, anxious temperament and cognitive flexibility scale were found to be negatively correlated. The negative relationship between anxious temperament and self-compassion, self-judgment, isolation, mindfulness, over-identification and cognitive flexibility emerges as a result suitable for anxious temperament characteristics.

Between cognitive flexibility scale and self compassion scale, cognitive flexibility scale and self-kindness, cognitive flexibility scale and self-judgment, cognitive flexibility scale and common humanity, cognitive flexibility scale and isolation, mindfulness, cognitive flexibility scale and over-identified were found to be positively correlated. Cognitive flexibility has features such as coping with unexpected situations, having problem-solving strategies, coping with stress or having skills such as critical thinking (50). From this point of view, it is a predictable result that there is a positive correlation between variables such as self-compassion, self-kindness, self-judgment, common humanity, isolation, mindfulness and over-identification, and cognitive flexibility.

CONCLUSION

In general, it is seen that cognitive flexibility has a positive relationship with functional temperament characteristics, while the tendency to deceive has a negative relationship. This situation emerges as a predictable result when looking at the nature of the variables. Due to the low availability of such studies in the literature, it is thought that the study will contribute to the literature.

ETHICAL DECLARATIONS

Ethics Committee Approval: The study was carried out with the permission of İstanbul Aydın University Social Sciences Ethics committee (Date: 09.06.2021, Decision No: 2021/07).

Informed Consent: All patients signed the free and informed consent form.

Referee Evaluation Process: Externally peer-reviewed.

Conflict of Interest Statement: The authors have no conflicts of interest to declare.

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